

☐ Work Coordination

Permit Not Required (Sections 3 through 7 optional)

Work Permit # SDD-2016-010/SS-2016-Work Order

Job# Activity# See "Instructions for Filling out the Work Permit" contained in the Work Planning and Control for Experiments and Operations Subject Area. 1. Work request WCC fills out this section. ☐ Standing Work Permit Date: 9/7/2016 Dept/Div/Group: PO/PHENIX Requester: P. Gianotti Ext.: 3815 Other Contact person (if different from requester): Carter Biggs Ext.: 7515 Work Control Coordinator: P. Giannotti Start Date: 9/7/2016 Est. End Date: 12/31/2016 Brief Description of Work: Remove & Repurpose MMS (includes disassembly and disposition of electronics, utilities and structural components) Room: IR and AH Equipment: entire MMS Service Provider: PHENIX and CAD techs and F&O personnel 2. WCC, Requester/Designee, Service Provider, and ESSH (as necessary) fill out this section or attach analysis **ESSH ANALYSIS** Contaminatio ■ None □ NORM **Radiation Concerns** □ Activation Airborne Radiation ☐ Other ☐ Special nuclear materials involved, notify Isotope Special Materials Group Fissionable/Radiological materials involved, notify Laboratory Nuclear Safety Officer ☐ Moisture Density □ Radiography ☐ Soil Density Gauges **Radiation Generating Devices:** Gauges ■ None Explosives ☐ Transport of Haz/Rad Material ☐ Pressurized Systems Safety and Security Concerns ☐ Fumes/Mist/Dust* ■ Magnetic Fields* ☐ Railroad Work ☐ Adding/Removing Walls or Roofs ☐ Critical Lift ☐ Nanomaterials/particles* ☐ Heat/Cold Stress ☐ Asbestos* ☐ Cryogenic □ Rigging ☐ Beryllium* □ Electrical ☐ Hydraulic ☐ Noise* ☐ Silica* ☐ Biohazard* □ Elevated Work ☐ Lasers* ■ Non-ionizing Radiation* ☐ Security Concerns ☐ Chemicals/Corrosives* ☐ Excavation □ Lead* Oxygen Deficiency* ☐ Suspect/Counterfeit Items ☐ Confined Space* ☐ Ergonomics* Material Handling ☐ Penetrating Fire Walls ☐ Vacuum Ladder Access Required:

☐ Portable Ladder ☐ Fixed Ladder– Status/Restrictions: ☐ Haz, Rad, Bio Material Exceed DOE 151.1-C Levels - Contact OEM ☐ Other * Safety Health Rep. Review Required **Environmental Concerns** ☐ None ☐ Work impacts Environmental Permit No. ☐ Atmospheric Discharges (rad/non-rad/GHG) ■ Land Use Institutional Controls ☐ Soil Activation/contamination ■ Waste-Mixed ☐ Chemical or Rad Material Storage or Use ☐ Liquid Discharges ☐ Waste-Clean ☐ Cesspools (UIC) ☐ PCB Management ☐ Waste-Hazardous ☐ Waste-Regulated Medical ■ Waste-Industrial ☐ High water/power consumption ☐ Spill potential ☐ Historical Enviornmental Hazards Waste disposition by: ☐ Other Pollution Prevention (P2)/Waste Minimization Opportunity:

No
Yes Environmental Preferable Products Available:

No

Yes ☐ Intermittent Energy Release **FACILITY CONCERNS** ☐ Potential to Cause a False Alarm ☐ Electrical Noise ☐ Vibrations Access/Egress Limitations Credited Controls (Use USI Process) ☐ Temperature Change Other ☐ Impacts Facility Use Agreement Configuration Management ☐ Maintenance Work on Ventilation Systems ☐ Utility Interruptions **WORK CONTROLS Work Practices** Spill Containment ☐ Exhaust Ventilation ☐ None ☐ Security (see Instruction Sheet) Back-up Person/Watch
 Back-up Pers ☐ Posting/Warning Signs ☐ Time Limitation Other ☐ Scaffolding-requires ☐ Barricades ☐ IH Survey ☐ Warning Alarm (i.e. "high level") ☐ Electrical Inspection Required inspection **Personal Protective Equipment** ☐ Gloves, as ☐ Lab Coat ☐ Ear Plugs ☐ None Safety Glasses, where reg'd necessary ☐ Ear Muffs ☐ Respirator* ☐ Coveralls ☐ Goggles ☐ Safety Harness Hard Hat. ☐ Disposable Clothing ☐ Face Shield ☐ Shoe Covers ☐ Other Safety Shoes, as req'd ☐ High visibility cloths/vest when Crane used Permits Required (Permits must be valid when job is scheduled.) ■ None ☐ Cutting/Welding ☐ Impair Fire Protection Systems ☐ Concrete/Masonry Penetration ☐ Digging/Core Drilling ☐ Rad Work Permit-RWP No ☐ Other ☐ Confined Space Entry ☐ Electrical Working Hot Dosimetry/Monitoring ☐ Heat Stress Monitor ■ None ☐ Real Time Monitor ☐ TLD ☐ Noise ☐ Air Effluent ☐ Self-reading Pencil Dosimeter ☐ Waste Characterization Survey/Dosimeter O₂/Combustible Gas ☐ Ground Water ☐ Self-reading Digital Dosimeter ☐ Other ☐ Passive Vapor ☐ Liquid Effluent ☐ Sorbent Tube/Filter Pump Training Requirements (List specific training requirements) Work screening has identified the following as the reason for permitted When work is categorized as worker planned work and a permit is used only the following signatures are required: (Although allowed, there is no need to use back of form) work: **⊠** ESSH WCC: Date: □ Complexity Service Provider: Date:

Authorization to start:

Date:

(Department/Division, or their equivalent, Sup/WCC/Designee)

Work Plan (procedures, timing, equipment, scheduling, coordination, notifications, and personnel availability need to be addressed in adequate detail): MMS disassembly of utilities, racks, cables & cable tray, piping, working surfaces, flow distribution devices and small support structures (less than ~50 lbs) will be performed as worker planned work with close coordination between workers, work supervisors and work control coordinators on a daily basis. A separate procedure for disassembly of large structural components will be planned separately as coordinated by PHENIX and CAD work control coordinators. In addition the following detector subsystem removal and repurpose will be controlled by separate work permits as follows: MPC-Ex South (SDD-2016-011), MPC South (SDD-2016-012), MuTr Station 1 South (SDD-2016-013), MuTr Station 2&3 South (SDD-2016-014). All parts, components, services, subassemblies, etc., removed from the MMS, including the structural components of the MMS itself, will be screend by BNL HP for activation and dispositioned Special Working Conditions Required (e.g., Industrial Hygiene hold points or other monitoring) Notifications to operations and Operational Limits Requirements: Post Work Testing, Notification or Documentation Required: Job Safety Analysis Required: ☐ Yes ☐ No Review Done: in series team Reviewed by: * Primary Reviewer signature (not required for Worker Planned Work) means that the Review Team members were appropriate for the work that was planned, the Team visited the job site, hazards and risks that could impact ESSH have been considered and controls established according to BNL requirements. In addition, this signature indicates that applicable JRAs, FRAs, as well as other planning documents have been reviewed and training requirements have been identified and recorded on this permit. Title Name (print) Life # Date Signature **ES&H Professional** F&O Facility Project Manager Service Provider Work Control Coordinator Safety Health Representative Research Space Manager Other Required Walkdown Completed *Primary Reviewer Job site personnel (Supervisor and workers) fill out this section. Note: Signature indicates personnel performing work have read and understand the hazards and permit requirements (including any attachments) and all training required for this permit is current/complete. Job Supervisor/Contractor Supervisor signatures also includes verification that worker training required for this permit is current/complete Job Supervisor: Contractor Supervisor: Workers: Life#: Workers: Life#: Workers are encouraged to provide feedback on ESSH concerns or on ideas for improved job work flow. Use feedback form or space below. 5. Department/Division, or their equivalent, Line Manager or Designee Conditions are appropriate to start work: (Permit has been reviewed, work controls are in place and site is ready for job.) Name: Signature: Life#: Date: 6. Worker provides feedback. Worker Feedback (use attached sheets as necessary) WCM/WCC: Are there any changes as a result of worker feedback? ☐ Yes ☐ No Note: See Work Planning and Control for Experiments and Operations Subject Area section 2.6. 7. Post Job Review/Closeout: Work Control Coordinator (authorizing dept.) checks quality of completed permit and ensures the work site is left in an acceptable condition. (WCC can delegate clean up of job site to work supervisor.) The WCC ensures that the change process to update drawings, placards, postings, procedures, etc., is initiated, if necessary Name: Life#: Date: Signature: Comments:

3. Both work requester and service provider contribute to work plan (use attachments for detailed plans)